

IN THE SPECIFICATION

Please insert the following section before page 1, line 1 of the application:

CROSS REFERENCES TO RELATED APPLICATIONS

This application is a Continuation application that claims the benefit of the filing date, under 35 USC § 120, of U.S. Application Serial No. 10/278,589 (to be issued as U.S. Patent No. 6,700,385) filed on October 22, 2002, which is a divisional application of U.S. Application Serial No. 09/876,200 (now U.S. Patent No. 6,614,235) filed on June 6, 2001.

Please change the paragraph starting at page 1, line 7 as follows:

It is desirable to be able to monitor various process and environmental parameters associated with a process to determine how well the process is functioning. For example, the temperature of a CVD (chemical vapor deposition) process (a critical parameter associated with the CVD process) may indicate the quality of the film being deposited by the CVD process at the time in question. For a non-moving object, there are many conventional process monitoring systems which permit various parameters to be determined. Unfortunately, it is difficult for such a conventional system to be used with [a] an object that is moving during the process in question. To better understand the problem, an example of a particular moving object (e.g., a reticle in a semiconductor manufacturing process) that needs to be monitored will be described, but it should be understood that the problem is associated with any moving object that needs to be monitored.

Please change the paragraph starting at page 1, line 17 as follows:

A reticle in a semiconductor manufacturing process is a specially made photo “negative” used to expose a photosensitized semiconductor wafer prior to etching in order to ultimately produce a plurality of integrated circuits (IC) on the semiconductor wafer. A typical reticle is made of quartz with thin chrome traces on it representing the desired electrical connections for the particular IC. Modern reticles with small geometry (e.g., very fine lines and a small spacing between the lines corresponding to the very close electrical traces on [moderns] modern ICs) are

particularly sensitive to various environmental and process parameters, such as exposure to electrostatic voltages. As a result of this exposure, the thin traces on the reticle can be damaged or destroyed and the process engineer may not realize that the reticle has been damaged.

Please change the paragraph starting at page 2, line 26 as follows:

Returning to Figure 2, the detector 58 may be implemented using any conventional detector suitable for common radio frequency range signals. Some attempts have been made to provide portable data storage systems that can travel along with the reticle in the reticle storage pod, such as Smart-Tag system by Asyst. This system consists of a miniature data storage device and an RF-ID module that can communicate with a corresponding stationary device that reads and writes data into the tag that moves with the reticle. This system, however, does not [observer] observe or record any in-process parameters.

Please change the paragraph starting at page 6, line 21 as follows:

FIG. 2 illustrates a block diagram of one embodiment of the data logging system in accordance with the invention. In particular, a data logger 20 (that may be an ASIC, a piece of hardware circuitry or one or more pieces of software being executed by a processor) collects data from one or more well known sensors 22 (Sensor 1, Sensor 2, ... Sensor n). Each sensor provides data about one or more parameters important to the user. For reticle handling, for example, it is important to know such parameters as 1) the presence and strength of an ESD [events] event; and 2) the rate of change and magnitude of the electrostatic fields. Other parameters can be measured as well since various different types of sensors can be connected to the data logger 20. The signal from each sensor may be conditioned and processed by a signal processing circuit 23 if needed. The processed signal then is provided to said data logger 20 which may contain one or more analog-to-digital converters 24 that converts the analog sensor signals into digital data as is well known in the art. Analog to digital conversion is used to enable storage and communication of data in digital format instead of analog format. It is also possible that a sensor may generate a digital signal and an A/D converter 24 may not be required.

The data logger 20 may operate with sensors that generate analog signals as well as sensors that generate digital signals.